Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

A and D, and construct the angle ECB equal to the angle sum of the triangle ECH, or two right angles$-a$. Then, the supplement of ECB is DCB $=a$. The individual angle DCB is the difference between the finite angle ECF less than two right angles and two right angles and is, therefore, finite.

But the angle DCB by hypothesis is less than any finite angle. Hence, contradictory marks are attributed to the supplementary angle DCB or a, which is absurd. Since the conclusion is absurd, the hypothesis from which it is deduced must be unsound.

"REMARKS ON DIVISION." By WILLIAM F. BRADBURY, Cambridge, Massachusetts.

I take issue with Mr. Ellwood in many of his statements in this article.

1st "If a given product is \$20, and the multiplier 4, we cannot by mere subtraction, find the multiplicand." But we can. Try some number say 4 and subtract thus: $20-4=16$: $16-4=12$: $12-4=8$: $8-4=4$. Now we have subtracted 4 times but have a remainder. Try 5 thus: $20-5=15$: $15-5=10$: $10-5=5$: $5-5=0$. Thus we find a number (5) which subtracted four times (as above) becomes 0. Therefore \$5 is the multiplicand.

Therefore *all* that he says about *abstract* and *concrete* falls to the ground.

2nd. So too $\frac{1}{4}$ of $\frac{8}{9}$ has been called by mathematicians from time immemorial a *compound fraction*. Therefore, this *is the name of it*. And further it is an example in multiplication of fractions. $\frac{1}{4}$ of $\frac{8}{9}=\frac{1}{4}\times\frac{8}{9}$. Now this sign, ×, is the sign of multiplication. It is *not* an example in division of fractions. It is an old story that multiplying by a number less than a unit gives a product that is less than the multiplicand. Because multiplying a number by $\frac{1}{4}$ is the same as dividing that number by 4. I do not call multiplying by $\frac{1}{4}$ an example in division. It is a mere quibble in words. What has been so named may as well keep its name.

3rd. So $\frac{4}{\frac{2}{3}}$ *is* a complex fraction, because *this is its name.* A fraction may well be defined as an indicated division. Thus $\frac{8}{9}$ may be read eight-ninths, or eight divided by nine. I am perfectly willing to leave $\frac{4}{\frac{2}{3}}$ and other complex fractions "as special gifts from high."

EDITORIALS

Professor Leonard E. Dickson goes to Chicago University as Fellow in Pure Mathematics, having resigned a Shattuck scholarship at Harvard to accept the Fellowship in Chicago University.

All of our subscribers who have not received all of the 7 Nos. of the MONTHLY will please write to the publishers at once, and tell them which Nos. you failed to receive.

Any contributor desiring printed copies of his solution may obtain the same at the rate of $1.00 per hundred pages.

Professor Robert J. Aley, Professor of Mathematics in the Indiana University, is teaching mathematics in a three weeks Institute held at Council Bluffs, Iowa. Professor Aley will teach mathematics in the Leland Sanford Jr. University the coming year, he having exchanged places with Professor John A. Miller.

We take this opportunity to thank our friends for the numerous Invitations, Programs, and Catalogues which we have received. We are glad to receive Catalogues from the various Schools and Colleges as we ourselves are interested in school work.

The July number of *The Monist*, a Chicago quarterly magazine, contains as its leading article, an essay by Dr. George Bruce Halsted which is attracting great attention. It is entitled "The Non-Euclidean Geometry Inevitable," and its new results are of high importance both in the history and philosophy of that facinating subject, with which Dr. Halsted's name has become identified.

BOOKS AND PERIODICALS.

The Principles of Elliptic and Hyperbolic Analysis. By Alexander Macfarlane, M. A., D. Sc., LL. D., Fellow of the Royal Society of Edinburgh, Professor of Physics in the University of Texas, Austin, Texas. Pamphlet form, 47 pp. Price, $0.50. New York: B. Westleman & Co.

In this paper, the author considers the versor part of space more fully and extends the investigation to elliptic and hyperbolic versors. The fundamental theorem of trigonometry is investigated for the sphere, the ellipsoid of revolution and the general ellipsoid; then for the equilateral hyperboloid of two sheets, the equilateral of one sheet and the general hyperboloid. The principles thus deduced are applied to find the complete form of other theorems in spherical trigonometry and to deduce the generalized theor ms for the ellipsoid and hyperboloid. At the end, the analogues of rotation theorem are deduced. B. F. F.

Mathematical Teaching and its Modern Methods. By Thurman Henry Saxfford, Ph. D., Field Memorial Professor of Astronomy in Williams College. 8 vo., paper back, 47 pp. Price $0.25. Boston: D. C. Heath & Co.

This valuable little monograph is full of mature thought on the subject of Mathematical Teaching and its Methods. It gives a very careful exposition of the principles that underlie the teaching of arithmetic, algebra, geometry; plane, algebraic, analytical and spherical trigonometry; and the differential and integral calculus, and higher analysis. B. F. F.

The First Steps in Algebra. By G. A. Wentworth, A. M., author of a Series of Text-books in Mathematics. 8 vo., half leather, 184 pp. Price, $0.70. Boston and Chicago: Ginn & Co.

This excellent little work is designed for pupils in the upper grades of gram-